

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P399536

Luminaire Tested: **ARCH-L-PA3-150-830-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399536  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-150-830-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13075 lumens  
Efficiency: N/A  
Efficacy: 85.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

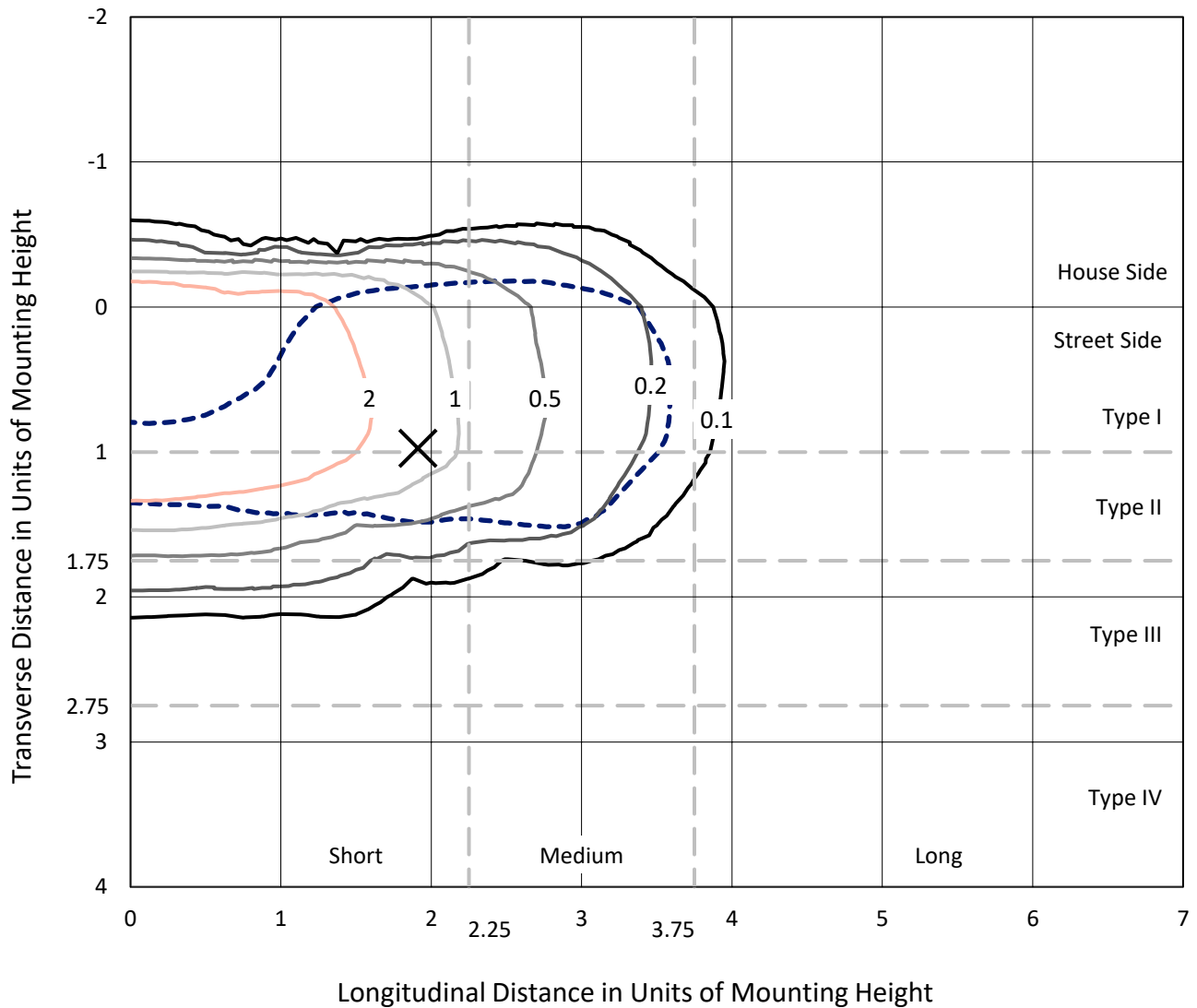
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

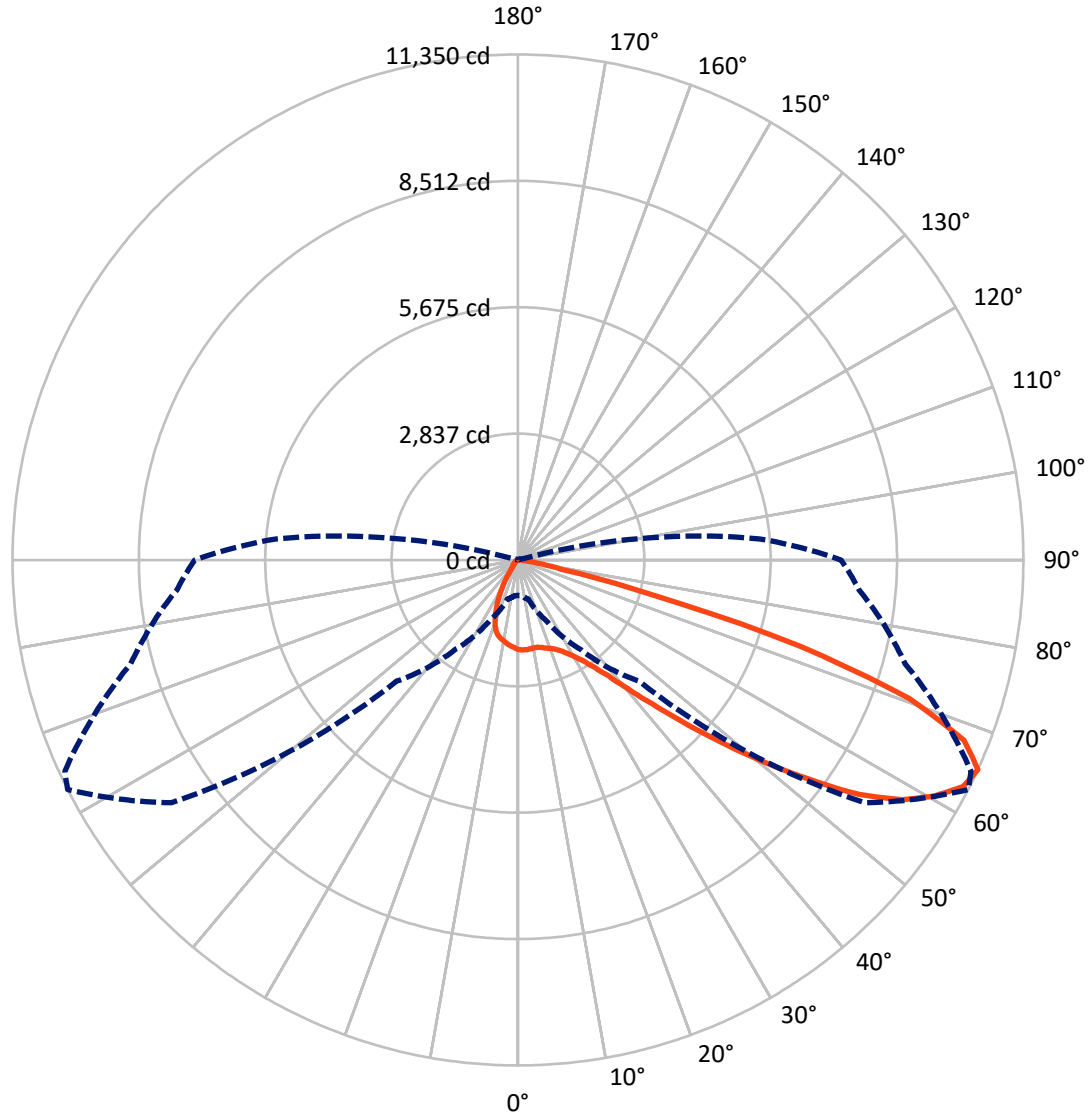
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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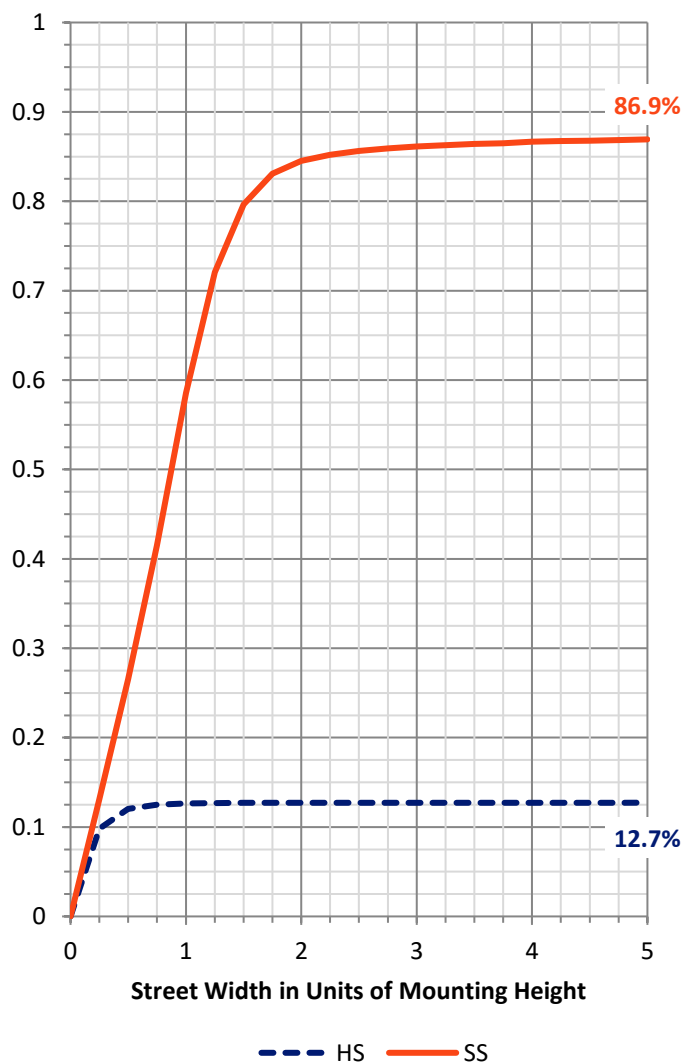
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1682.7	0.0	1682.7
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	11392.3	0.0	11392.3
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	13075.0	0.0	13075.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.8	1.4
10°-20°	453.4	3.5
20°-30°	672.0	5.1
30°-40°	1247.8	9.5
40°-50°	2643.3	20.2
50°-60°	3655.0	28.0
60°-70°	2926.0	22.4
70°-80°	1215.7	9.3
80°-90°	78.1	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	13075.0	100.0
0°-180°	13075.0	100.0

**Coefficient of Utilization**

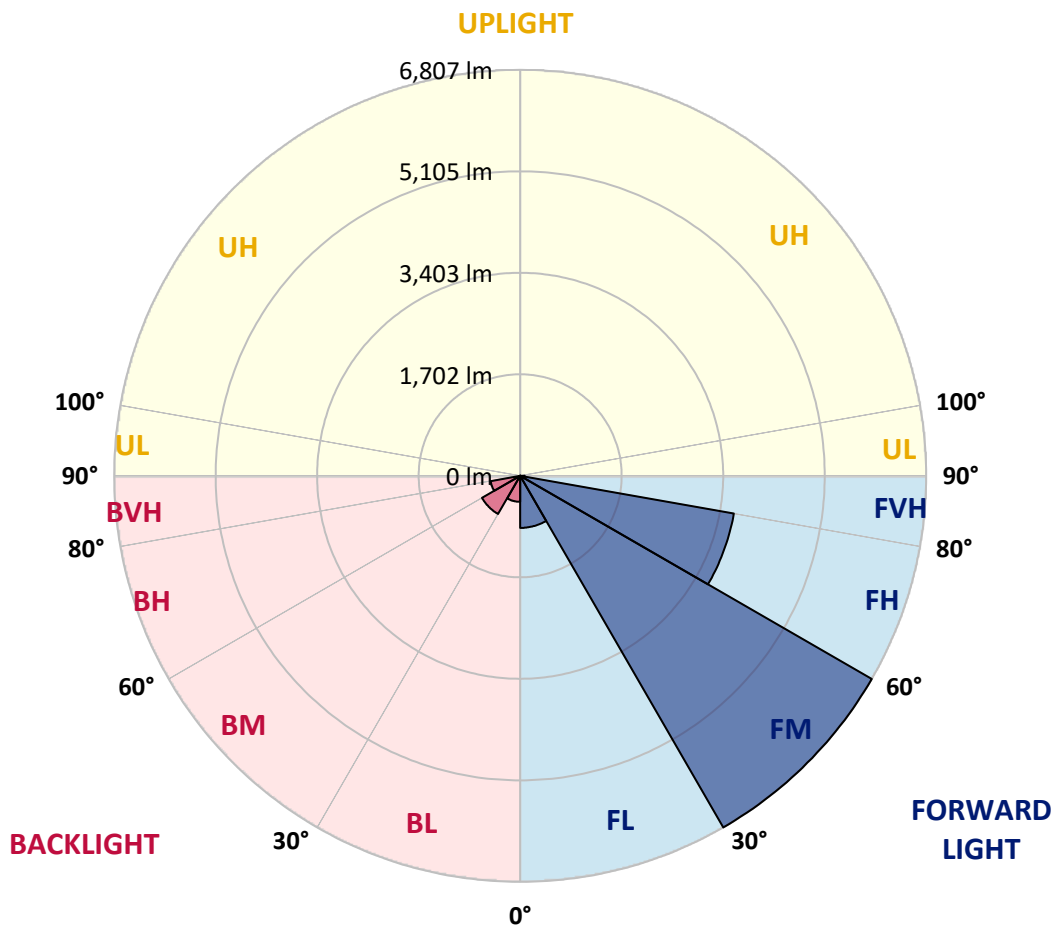


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	873.1	6.7			
FM (30°-60°)	6806.9	52.1			
FH (60°-80°)	3637.8	27.8			G2/5000
FVH (80°-90°)	74.5	0.6			G1/100
BL (0°-30°)	436.1	3.3	B1/500		
BM (30°-60°)	739.2	5.7	B1/1000		
BH (60°-80°)	503.9	3.9	B2/1000		G2/1000
BVH (80°-90°)	3.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2
2.5°	2048.8	2043.8	2038.9	2036.4	2036.4	2034.0	2024.1	2021.6	2016.7	2011.7	2006.8
5°	2029.0	2021.6	2019.1	2021.6	2024.1	2029.0	2024.1	2024.1	2019.1	2014.2	2004.3
7.5°	1979.7	1974.7	1977.2	1984.6	1987.1	2004.3	2006.8	2014.2	2014.2	2009.3	2001.9
10°	1920.4	1917.9	1917.9	1930.3	1942.6	1967.3	1984.6	2004.3	2006.8	2006.8	1994.5
12.5°	1876.0	1873.5	1880.9	1895.7	1920.4	1952.5	1982.1	2011.7	2016.7	2019.1	1999.4
15°	1848.8	1848.8	1858.7	1888.3	1922.9	1967.3	2001.9	2041.4	2046.3	2043.8	2016.7
17.5°	1824.1	1826.6	1846.4	1895.7	1935.2	1994.5	2036.4	2080.9	2083.3	2080.9	2036.4
20°	1814.3	1819.2	1848.8	1913.0	1957.4	2024.1	2078.4	2122.8	2125.3	2115.4	2056.2
22.5°	1841.4	1843.9	1880.9	1950.0	1992.0	2066.0	2135.2	2177.1	2179.6	2164.8	2085.8
25°	1935.2	1935.2	1967.3	2026.6	2063.6	2137.6	2211.7	2261.1	2261.1	2243.8	2152.4
27.5°	2154.9	2135.2	2127.8	2145.0	2157.4	2236.4	2315.4	2377.1	2374.6	2349.9	2238.8
30°	2579.5	2530.1	2451.1	2362.3	2317.8	2372.1	2446.2	2525.2	2522.7	2483.2	2345.0
32.5°	3292.8	3221.3	3033.7	2799.2	2609.1	2547.4	2616.5	2702.9	2705.4	2658.5	2515.3
35°	4292.5	4179.0	3843.3	3517.5	3083.0	2848.5	2868.3	2962.1	2991.7	2967.0	2801.6
37.5°	5255.2	5151.5	4830.7	4378.9	3789.0	3310.1	3226.2	3307.7	3342.2	3342.2	3167.0
40°	6225.3	6104.3	5820.5	5366.3	4744.3	4030.9	3729.7	3796.4	3833.4	3840.8	3611.3
42.5°	7002.8	6923.8	6706.6	6353.7	5771.1	5294.7	4455.5	4418.4	4453.0	4425.8	4127.2
45°	7540.9	7479.2	7328.7	7195.4	6911.5	6672.1	5425.5	5176.2	5198.4	5104.6	4707.2
47.5°	7652.0	7582.9	7550.8	7736.0	7938.4	7997.6	6617.8	6077.2	6055.0	5847.6	5309.5
50°	7168.2	7175.6	7294.1	7822.3	8666.5	9199.7	8000.1	7094.2	7012.7	6551.1	5869.8
52.5°	6124.1	6242.6	6541.2	7397.8	8888.7	10073.5	9382.4	8172.9	8047.0	7234.9	6289.5
55°	4791.2	4944.2	5435.4	6420.3	8424.6	10463.5	10547.5	9293.5	9007.2	7748.3	6615.3
57.5°	3561.9	3608.8	4181.5	5080.0	7326.2	10080.9	11144.8	10157.4	9789.7	8158.0	6938.7
60°	2219.1	2248.7	2853.5	3868.0	5549.0	8666.5	11144.8	10752.3	10401.8	8525.8	7234.9
62.5°	1379.8	1389.7	1616.8	2651.1	3771.7	6427.7	10683.2	11213.9	10932.5	8790.0	7489.1
65°	794.8	804.7	910.8	1498.3	2453.6	3848.2	9503.3	11349.7	11223.8	8999.8	7686.6
67.5°	580.1	585.0	627.0	841.7	1604.5	1977.2	7138.6	10804.2	10962.1	9103.4	7681.6
70°	503.6	511.0	565.3	656.6	1157.7	1214.5	3633.5	9330.5	9772.4	8955.3	7452.1
72.5°	387.5	397.4	478.9	617.1	849.1	873.8	1315.7	6640.0	7308.9	8029.7	6822.6
75°	266.6	276.5	357.9	508.5	701.0	654.1	723.2	3055.9	3855.6	5386.0	5193.5
77.5°	170.3	172.8	224.6	370.3	604.8	464.1	496.1	997.2	1399.6	2436.3	2451.1
80°	113.5	116.0	138.2	239.4	414.7	429.5	306.1	461.6	506.0	710.9	493.7
82.5°	69.1	69.1	93.8	150.6	251.8	355.4	199.9	241.9	259.2	274.0	128.4
85°	27.2	27.2	56.8	98.7	158.0	165.4	125.9	140.7	148.1	160.4	59.2
87.5°	7.4	7.4	32.1	54.3	69.1	76.5	76.5	69.1	74.1	91.3	29.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2	2014.2
2.5°	2004.3	1996.9	1987.1	1977.2	1967.3	1959.9	1952.5	1952.5	1947.6	1940.2	1935.2
5°	1999.4	1987.1	1964.8	1947.6	1920.4	1900.7	1885.9	1873.5	1866.1	1848.8	1846.4
7.5°	1992.0	1977.2	1945.1	1910.5	1866.1	1831.5	1797.0	1772.3	1747.6	1727.9	1722.9
10°	1979.7	1962.4	1915.5	1866.1	1804.4	1740.2	1658.8	1565.0	1478.6	1429.2	1414.4
12.5°	1979.7	1957.4	1895.7	1829.1	1740.2	1582.2	1374.9	1167.6	1007.1	935.5	915.8
15°	1992.0	1962.4	1880.9	1789.6	1624.2	1303.3	967.6	693.6	518.4	464.1	451.7
17.5°	2004.3	1962.4	1858.7	1735.3	1411.9	945.4	550.5	365.3	308.5	296.2	296.2
20°	2009.3	1957.4	1829.1	1634.1	1128.1	587.5	328.3	274.0	251.8	244.4	244.4
22.5°	2029.0	1959.9	1806.9	1488.4	819.5	345.6	259.2	229.6	207.3	199.9	199.9
25°	2078.4	1989.5	1811.8	1303.3	525.8	261.6	219.7	190.1	167.9	158.0	158.0
27.5°	2157.4	2056.2	1839.0	1088.6	330.8	224.6	185.1	153.0	135.8	125.9	125.9
30°	2246.2	2130.2	1851.3	841.7	246.8	190.1	150.6	121.0	108.6	101.2	98.7
32.5°	2401.7	2258.6	1841.4	577.6	202.4	160.4	121.0	96.3	86.4	83.9	83.9
35°	2651.1	2483.2	1821.7	362.9	167.9	128.4	96.3	79.0	71.6	69.1	66.6
37.5°	2989.2	2811.5	1762.4	239.4	138.2	101.2	79.0	66.6	59.2	56.8	56.8
40°	3401.4	3186.7	1648.9	182.7	118.5	81.5	66.6	56.8	51.8	49.4	49.4
42.5°	3872.9	3603.9	1468.7	158.0	98.7	69.1	56.8	46.9	44.4	42.0	42.0
45°	4388.8	4040.8	1219.4	140.7	83.9	56.8	46.9	42.0	37.0	37.0	34.6
47.5°	4936.8	4480.1	938.0	123.4	71.6	49.4	42.0	34.6	32.1	29.6	29.6
50°	5465.0	4872.6	659.1	106.1	59.2	42.0	34.6	29.6	27.2	24.7	24.7
52.5°	5837.8	5109.6	466.5	91.3	49.4	37.0	27.2	22.2	19.7	19.7	19.7
55°	6136.4	5257.7	325.8	76.5	42.0	32.1	22.2	17.3	17.3	14.8	14.8
57.5°	6417.8	5353.9	239.4	64.2	34.6	24.7	17.3	12.3	12.3	9.9	9.9
60°	6709.1	5405.8	182.7	51.8	29.6	19.7	12.3	9.9	7.4	7.4	7.4
62.5°	7002.8	5437.9	140.7	42.0	24.7	14.8	9.9	7.4	4.9	2.5	2.5
65°	7259.6	5447.7	108.6	32.1	19.7	9.9	7.4	2.5	0.0	0.0	0.0
67.5°	7336.1	5334.2	83.9	24.7	14.8	7.4	4.9	0.0	0.0	0.0	0.0
70°	7128.7	5033.1	64.2	19.7	12.3	4.9	2.5	0.0	0.0	0.0	0.0
72.5°	6326.5	4221.0	49.4	12.3	9.9	4.9	2.5	0.0	0.0	0.0	0.0
75°	4527.0	2251.2	34.6	9.9	7.4	2.5	0.0	0.0	0.0	0.0	0.0
77.5°	2083.3	871.3	24.7	7.4	4.9	2.5	0.0	0.0	0.0	0.0	0.0
80°	407.3	217.2	9.9	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	93.8	37.0	4.9	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	32.1	12.3	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.3	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)